

### **REMARKS**

Claims 1-7, 9-18, and 21-27 are pending in this application. Claims 8, 19, and 20 were previously cancelled. In view of the remarks contained herein, Applicant respectfully requests reconsideration of the claims.

#### **I. COMPLETENESS OF EXAMINATION**

In accordance with 37 C.F.R. section 1.104(c)(2), “[t]he pertinence of each reference, if not apparent, *must be clearly explained* and each rejected claim specified.” 37 C.F.R. § 1.104.(2) (emphasis added.) Section 1.104(c)(2) further states, “When a reference is complex or shows or describes inventions other than that claimed by the application, the particular part relied on must be designated as nearly as practicable.” *Id.* As noted in MPEP § 706, “The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity.” Applicant contends that the Examiner has not yet provided a complete examination that includes a clear explanation as to how the cited references apply to *all* of the claim limitations of the pending application. In examining a group of multiple claims, the Examiner does not fulfill his obligation by summarizing a perceived gist of a portion of the claims while only specifically discussing one or two actual claim limitations of the entire group of claims.

In his original Office Action, dated August 31, 2007, the Examiner rejected claims 1-5, 15-16, 24, and 27 by stating:

Pandya teaches a method and system (abstract) of enforcing bandwidth limitations via QoS techniques (col. 1, line 1 – col. 5, line 15) for local and wireless networks (col. 5, line 15 – col. 8, line 10). In particular, a control system permits or prevents transmission of requested feed data based on client eligibility (col. 8, line 10 – col. 33, line 5).

Pandya does not expressly disclose reimbursement for previously lost data. Matsubara teaches a method and system (abstract) of billing in QoS systems (Paras. 1-48) that specifies bill handling and reimbursement of such systems (Paras. 49-151). At the time

the invention was made, one of ordinary skill in the art would have added the features in order to ensure billing fairness to a user (Para. 15). August 31 Office Action, p 2.

The Examiner did not state to which claim limitations of claims 1-5, 15-16, 24, and/or 27 these arguments applied. Moreover, none of claims 1-5, 15-16, 24, or 27 specifically discuss quality of service (QoS) techniques. That characterization was the Examiner summarizing the gist of what he perceives the claims to be.

Claim 1, as it existed for the first office action and presently, requires, “if said client is not eligible, then said system is able to prevent said transmission and to withhold said feed data from said client without prolonging the duration of any network connection from said server to said client.” The Examiner has never addressed whether any of the cited references teach “without prolonging the duration of any network connection,” as required by claim 1. Claim 4, as it existed for the first office action and presently, requires, “wherein said multiple clients are personal computers.” The Examiner’s explanation above does not address this limitation, yet claim 4 is still rejected. Claim 24, which has had a minor amendment since the first office action, requires:

wherein the amount of feed data eligible to be received by a client from a server at a current time is determined as a function of credit existing at the time of a previous data transmission, time elapsed between said time of previous successful data transmission and said current time, the size of said previous data transmission, and bandwidth limitation configuration settings. (underlining added to reflect the amendment.)

This claim provides a specific formula for calculating the amount of feed data eligible to be received. The above statement from the Examiner does not address this formula, even though it purports to support rejection of claim 24.

In short, the Examiner has failed to address all of the limitations that he is contending to reject. Moreover, based on the claim language, the Examiner’s support for his rejections is insufficient to clearly explain the rejection of each claim and does not provide Applicant with any opportunity to offer evidence of patentability. Neither the Final Office Action, dated February 6, 2008, nor the Advisory Action, dated May 2, 2008, provides much more detail with

regard to the Examiner's application of the cited references to the actual claim limitations other than specific response to Applicant's arguments.

Additionally, in the original Office Action, dated August 31, 2007, and again in the Final Office Action, dated February 6, 2008, the Examiner provided the wrong patent number for *Cain*. The title of USPN 7,085,290 to Cain, et al., which is the patent number cited by the Examiner, is "MOBILE AD HOC NETWORK (MANET) PROVIDING CONNECTIVITY ENHANCEMENT FEATURES AND RELATED METHODS." This patent is not the same as USPN 6,982,987 to Cain, titled, "WIRELESS COMMUNICATION NETWORK INCLUDING DATA PRIORITIZATION AND PACKET RECEPTION ERROR DETERMINATION FEATURES AND RELATED METHODS," to which the Examiner, while providing the wrong patent number (i.e., 7,085,290), was nonetheless still citing from. Because of the arguable similarity of the two *Cain* patents ('290 & '987), Applicant did not discover this mistake until the Advisory Action, in which the Examiner cited to a column that was beyond the end of the '290 *Cain*.

Applicant, therefore, respectfully requests the Examiner to perform a thorough examination that clearly explains his rejections with regard to all of the claimed limitations.

## II. RESPONSE TO EXAMINER'S ARGUMENTS

In responding to Applicant's arguments and remarks from the Response, dated March, 28, 2008, the Examiner states that, "it is noted that the features upon which applicant relies (i.e., various interpretations of phrases) are not recited in the rejected claim(s)." Advisory Action, p. 2. However, Applicant does not understand which arguments were made in the Response that the Examiner is referring to. Applicant argued, "There is no discussion of determining eligibility to receive a required feed data transmission." March 28 Response, p. 2. Claim 1 requires, "an eligibility system that determines if a client or multiple clients on said network is eligible to receive requested feed data transmission." Claim 14 requires, "receiving a request for transmission of data;" and "computing transmission eligibility." Claim 17 requires, "receiving a request from a client for transmission of a server's feed data;" and "determining if said client is eligible to receive said requested feed data transmission from said server." Claim 24 requires,

“A method of enforcing network bandwidth limitation, wherein the amount of feed data eligible to be received by a client from a server at a current time is determined ...” And, claim 27 requires, “means for receiving a request from a client for transmission of a server’s feed data;” and “means for determining if said client is eligible to receive said requested feed data transmission from said server.” Thus, Applicant’s argument was accurate with regard to the plain language of the claims.

Applicant also argued, “Claims 11 and 26 recite computation of an earliest elapsed time E when the client will be eligible to receive the feed data.” March 28 Response, p. 9. Claim 11 requires, “further able to compute for said client and said feed data the earliest elapsed time E at which said client will be eligible to receive said feed data.” Claim 26 requires, “computing for said client and said feed data the earliest elapsed time E at which said client will be eligible to receive said feed data.” Again, Applicant’s argument accurately reflects the specific language of the claims at issue.

Applicant was unable to find one instance in which features relied upon in Applicant’s arguments were not recited in the claims. The remaining arguments and remarks made by Applicant with regard to claims 9, 13, 16, 18, 22, 23, and 25, also accurately reflected the language of the corresponding claim. Therefore, Applicant believes that the Examiner made his statement regarding Applicant arguing unclaimed limitations in error. If the Examiner believes otherwise, he is respectfully requested to identify such arguments to Applicant.

Based on the remarks and explanations of the claim rejections, Applicant asserts that the Examiner has improperly ignored claim language by summarizing the gist of certain limitations while not addressing other explicit limitations completely. Applicant, therefore, again respectfully requests that the Examiner provide a thorough and complete examination of the claims which clearly identifies his rejections of the claim language and limitations based on the asserted art.

### III. REJECTIONS UNDER 35 U.S.C. § 103

In *Graham v. John Deere Co. of Kansas City*, the Supreme Court set out a framework for applying the statutory language of §103. 383 U.S. 1 (1966). The Court stated:

Under [35 U.S.C. §]103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. *Id.*, at 17–18.

The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. *KSR Int'l Co., v. Teleflex, Inc.*, 550 U.S. \_\_\_\_\_ (2007). However, in order to prove obviousness, the prior art must still show such “familiar” elements and known methods. *See Graham*, 383 U.S. at 26, 34-35 (describing each claimed limitation to be found in the prior art).

#### *A. Claims 1-7, 9, 14-18, 24, and 27*

Claims 1-7, 9, 14-18, 24, and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Number 7,260,635 to Pandya, et al. (hereinafter *Pandya*) in view of U.S. Patent Application Publication Number 2004/0008688 to Matsubara, et al., (hereinafter *Matsubara*), and U.S. Patent Number 6,982,987 to Cain (hereinafter *Cain*).

Claim 1, as previously amended, requires, “an eligibility system that determines if a client or multiple clients on said network is eligible to receive requested feed data transmission from a server or multiple servers on said network based upon an amount of time since last successful receipt of a feed data transmission.” Claim 14, as previously amended, requires, “modifying eligibility data based upon an amount of time since last successful receipt of a feed

data transmission.” Claim 17, as previously amended, requires, “determining if said client is eligible to receive said requested feed data transmission from said server by computing the elapsed time between a last feed data transmission and a current feed data request.” Claim 24, as previously amended, requires, “wherein the amount of feed data eligible to be received by a client from a server at a current time is determined as a function of credit existing at the time of a previous data transmission, time elapsed between said time of previous successful data transmission and said current time.” And, claim 27, as previously amended, requires, “means for determining if said client is eligible to receive said requested feed data transmission from said server based upon an amount of time since last successful receipt of a feed data transmission.” Applicant believes that the Examiner’s contention is that the combination of *Pandya* and *Matsubara* do not teach this limitation, but that *Cain*’s teaching of a TDMA system with scheduling and analysis is the same thing.

The Examiner states that “Applicant seems to be trying to narrow the interpretation of” this limitation “beyond scheduling and analysis.” Advisory Action, pp. 2-3. The scheduling and analysis referred to by the Examiner are the scheduling of the time slots that occurs in TDMA systems. The Examiner reasons that TDMA “scheduling is dependent on ensuring that two transmission don’t occur at once, and in determining whether the previous transmission is successful.” Advisory Action, p. 3. Whether or not this statement by the Examiner is true is unimportant because it has no relation to the claimed limitation. TDMA is a *transmission* scheme allowing for multiple users to access the same transmission channel frequency by dividing that channel into multiple time slots. The transmitting parties are then scheduled for various time slots. In the receiving stage, the multiplexed transmission is de-multiplexed in order for the receiver to assemble the appropriate message. However, the receiver is not “scheduled” or actively limited to any particular amount of signal data for receipt other than by the physical limitations of network capacity or performance. The receiver not receiving data because of a network overload is completely different and is not a “functional equivalent” of the system determining what the receiver’s eligibility to receive data is when there is ample capacity. The TDMA system in *Cain* simply does not determine if the receiving party (i.e., the client or multiple clients) is eligible to receive feed data that they have requested, because the *Cain* system discusses the transmitter’s scheduling and operation.

Moreover, *Cain* does not discuss that *anything* is affected by an elapsed time since a last successful receipt of feed data or any data, as required in claims 1, 14, 24, and 27. The Examiner's statement that TDMA's scheduling is to ensure that two transmissions do not occur at once and determining whether the previous transmission is successful, does not actually reflect the claims' requirement that eligibility for receipt is based on an elapsed time since the last successful receipt. Even when considering an analogy of the transmitting side, as discussed in *Cain* with respect to TDMA, the different users are scheduled for different time slots. Whether or not the previous transmission on a time slot for a particular user was, in fact, successful, will not affect when that user will be scheduled for another time slot. It may affect the data content that is transmitted in that next scheduled time slot (repeated data if the transmission was unsuccessful vs. new data if the transmission was successful), but that next time slot will be scheduled for that user independent from the success of the previous transmission and certainly independent from the elapsed time since a last successful receipt, as required in claims 1, 17, 24, and 27.

The Examiner states that *Cain* discusses determining success of transmission at column 5, lines 45-55. Advisory Action, p. 3. However, this selection from *Cain* actually discusses how to avoid the conflict of allocating a given time slot to more than one neighbor. Col. 5, lns 37-42. *Cain* states that, "this conflict [of allocating a time slot to multiple users] may be eliminated by confirmation messages which indicate the selection of one neighbor node for the time slot, as is discussed in more detail below." Col. 5, lns 38-42. These "confirmation messages" referred to here are then explained in the selection cited by the Examiner. Thus, this teaching from *Cain* cited by the Examiner does not discuss or even suggest determining whether a transmission has been successful, but rather teaches how to avoid two users being allocated to the same time slot. It is also undisputable that there is no discussion of an elapsed time since a last successful receipt, as required by claims 1, 17, 24, and 27.

*Cain*'s discussion of conflict avoidance is again mistaken by the Examiner in his argument that "[t]his includes making a retransmission eligible if and only if the first transmission fails (col. 19, lines 25-45; col. 20, lines 50-60)." Advisory Action, p. 3. The cited selection from *Cain* deals with the processes involved in assigning time slots. *Cain* states that

“[r]eceived messages are first checked versus the link scheduling message DB to insure [sic] that the message is consistent with the current state of the DB.” Col. 19, lns 18-20. The later portion in column 19 cited by the Examiner states that, “[i]f a link addition cannot be initiated because another SP protocol thread is currently in process, the link addition will be postponed by backing off and rescheduling for a later time when the other process is expected to be completed.” Col. 19, lns 28-32. However, this says nothing about modifying an eligibility because of an elapsed time since a successful transmission. The fact that the link could not be initiated in this section of *Cain* is because of a possible conflict between nodes trying to add links simultaneously and not because of some failure of the transmission or, as claimed, an elapsed time since a last successful receipt. *Cain* goes on to state, “Allowing multiple attempts is done to handle potential conflict between several nodes attempting to add links simultaneously.” Col. 19, lns 33-35. This conflict-avoidance delay, as described in *Cain*, is not the functional equivalent of determining eligibility to receive requested feed data based on an amount of time since a last successful receipt of the feed data transmission, as required in claims 1, 14, 24, and 27. Thus, the combination of *Pandya*, *Matsubara*, and *Cain* do not teach or even suggest this limitation of claims 1, 14, 24, and 27.

Claim 1 further requires, “if said client is not eligible, then said system is able to prevent said transmission and to withhold said feed data from said client without prolonging the duration of any network connection from said server to said client.” Claim 17 further requires, “if said client is not eligible, then preventing said transmission and withholding said feed data from said client without prolonging the duration of any network connection from said server to said client.” The Examiner has not addressed this limitation in any of *Pandya*, *Matsubara*, or *Cain*. In fact, none of *Pandya*, *Matsubara*, or *Cain* teaches or suggests this “without prolonging the duration of any network connection from said server to said client.” As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claims 1 and 17.

Claim 17 also requires, “receiving a request from a client for transmission of a server’s feed data;” and “receiving a client timestamp from said client.” Claim 24 requires, “means for receiving a request from a client for transmission of a server’s feed data;” and “means for



receiving a client timestamp from said client.” The Examiner has not addressed these limitations from claims 17 and 24. Neither of *Pandya*, *Matsubara*, or *Cain* teach or even suggest receiving a request from a client for transmission of a server’s feed data and also receiving a client timestamp from the client. The Examiner has suggested that a time slot designator may be the functional equivalent of a timestamp. Advisory Action, p. 4. However, while Applicant does not agree that a time slot indicator is functionally equivalent to a timestamp, the claimed limitation requires receiving a client timestamp from a client. TDMA systems assign the time slot, which would have its time slot indicator, to the transmitting source and not the client requesting to receive the feed data. Therefore, there would be no reception of the client timestamp from the client that is requesting to receive the feed data, as required in claims 17 and 24. As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claims 17 and 27.

Claim 17, as previously amended, also requires:

determining if said client is eligible to receive said requested feed data transmission from said server by computing the elapsed time between a last feed data transmission and a current feed data request; multiplying said elapsed time by a predetermined bandwidth allocation, adding the product to a stored credit value reduced by the size of said last feed data transmission, and storing the result as a new credit value; and if said new credit value is greater than zero, said client is eligible

The lack of disclosure in the cited art with regard to the limitation concerning the elapsed time was addressed above. However, claim 17 also requires computing a current feed data request, multiplying the elapsed time by a predetermined bandwidth allocation and adding the product to a stored credit value that is reduced by the size of the last feed data transmission. None of *Pandya*, *Matsubara*, or *Cain* teaches or suggests computing a current feed data request, multiplying the calculated elapsed time by a predetermined bandwidth allocation and adding the product of the multiplication to a stored credit value minus the size of the last feed data transmission. As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claim 17.

Claim 24, as previously amended, requires:

wherein the amount of feed data eligible to be received by a client from a server at a current time is determined as a function of credit existing at the time of a previous data transmission, time elapsed between said time of previous successful data transmission and said current time, the size of said previous data transmission, and bandwidth limitation configuration settings.

As with claim 17, the lack of disclosure in the cited art with regard to the limitation concerning the elapsed time was addressed above. However, claim 24 also requires that the amount of feed data eligibility to be received by a client is a function of credit available at a previous data transmission, the time elapsed discussed previously, the size of the previous data transmission, and the bandwidth limitation configuration settings. The Examiner has not addressed each of these limitations with respect to any of *Pandya*, *Matsubara*, or *Cain*. In fact none of *Pandya*, *Matsubara*, or *Cain*, either singly or in combination, teach or suggest this combination of limitations required in claim 24. As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claim 24.

Based on the foregoing, Applicant, respectfully requests that the rejections of independent claims 1, 14, 17, 24, and 27 be withdrawn.

Claims 2-7, 9, 15, 16, and 18 depend from claims 1, 14, and 17, respectively, and, thus, inherit all of the limitations of their respective base claims. Accordingly, claims 2-7, 9, 15, 16, and 18 are allowable not only based on their dependence from claims 1, 14, and 17, respectively, but also for the limitations they add which are not disclosed or suggested in the cited prior art.

For example, claim 6 requires, “wherein said server comprises a feed timestamp that monotonically increases whenever said feed data at said server is uploaded.” The Examiner has not addressed this limitation with respect to any of *Pandya*, *Matsubara*, or *Cain*. In fact none of *Pandya*, *Matsubara*, or *Cain*, either singly or in combination, teach or suggest this limitation required in claim 6. As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claim 6.

In further example, claim 16 requires, “further comprising ignoring said computed transmission eligibility, such that the increased bandwidth usage by said high-priority data reduces bandwidth available for future standard transmissions.” The Examiner states that this limitation is not only inherent, “but is the side effect of any QoS system that considers priority or service-level agreements.” Advisory Action, p. 4. He continues, “If you give bandwidth to a high-priority message, there is less bandwidth for low-priority messages, even when there is a temporal issue (the claim does not specify when the high-priority data transmission occurs).” *Id.* Applicant would point out to the Examiner that there is a temporal relationship between the claimed “high-priority data” and the claimed “standard transmissions.” Claim 16 describes the standard transmissions as *future* standard transmissions. Thus, the high-priority data, which supersedes or ignores eligibility limitations, occur prior to these “future standard transmissions,” which are reduced in bandwidth because of the increased bandwidth usage by the previous high-priority data.

Applicant further contends that the Examiner is completely wrong in his conclusion that this limitation is inherent, i.e., “the side-effect” of any QoS that considers priority or service-level agreements. In computing networks, QoS is geared toward network traffic management such as bit rate, jitter, packet loss, and the like, in order to keep the network up and running smoothly. In the telephony world, QoS is geared toward connection time, signal-to-noise ratio, cross-talk, echo, and the like, to provide an acceptable service quality for voice communication. However, none of the discussion regarding QoS in any of *Pandya*, *Matsubara*, or *Cain* discloses or suggests reducing a future bandwidth eligibility based on a prior transmission of high-priority data. As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claim 16.

Another example is claim 18. Claim 18 requires:

wherein said determining if feed data has been lost comprises comparing said client timestamp to an expected timestamp, and if equal, then writing said expected timestamp into a confirmed timestamp and writing an expected data into a confirmed data, and if smaller, then making no change to said confirmed timestamp and said confirmed data.

In arguing support for his rejection of claim 18, the Examiner states that, “applicant argues that the combination of Pandya, Matsubara and Cain doesn’t expressly disclose determining whether a transmission was successful.” February 6 Final Office Action, p. 3. The Examiner continues by concluding, “Pandya teaches this limitation (col.15, lines 15-50).” *Id.* However, this cited selection from *Pandya* does not even teach or suggest determining whether a transmission was successful, let alone teaching determination of whether feed data has been lost by comparing the client timestamp to an expected timestamp and then, if they are equal, writing the expected timestamp into a confirmed timestamp and writing an expected data into a confirmed data or, if the client timestamp is smaller than the expected timestamp, then making no change to the confirmed timestamp or the confirmed data, as required by claim 18. The cited selection from *Pandya* discusses how bandwidth usage and other allocation data is reported to the control point by each agent in order for the control point to re-allocate bandwidth for the next communication cycle. Col. 15, lns 24-34. In fact, none of *Pandya*, *Matsubara*, or *Cain*, either singly or in combination, teach or suggest this limitation required in claim 18. As such, the combination of *Pandya*, *Matsubara*, and *Cain* does not teach or even suggest each and every limitation of claim 18.

Based on the foregoing, Applicant respectfully requests that the rejections of claims 2-7, 9, 15, 16, and 18 likewise be withdrawn.

***B. Claims 10-13, 21-23, 25, and 26***

Claims 10-13, 21-23, 25, and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pandya* in view *Matsubara* and *Cain*, in further view of U.S. Patent Number 7,068,660 to Suni (hereinafter *Suni*).

Claims 10-13, 21-23, 25, and 26 depend from claims 1, 17, and 24, respectively, and, thus, inherit all of the limitations of their respective base claims. Accordingly, claims 10-13, 21-23, 25, and 26 are allowable not only based on their dependence from claims 1, 17, and 24, respectively, but also for the limitations they add which are not disclosed or suggested in the cited prior art.

In supporting his rejection of claims 10-13, 21-23, 25, and 26, the Examiner cautioned that, “one must be careful not to read the limitations too narrowly or to ignore functional equivalencies.” Advisory Action, p. 4. However, the “functional equivalencies” suggested by the Examiner actually ignore what the claims are describing. In general, if claims are written in a product-by-process style (which is not the case in the present application), the Examiner may often ignore the process step details in order to compare art that provides a functionally equivalent end product. However, outside of product-by-process claims, the Examiner is required to reject all of the limitations of the claims and not just an end result. If a claim recites a formula, such as  $A+B=C$ , the Examiner cannot generally reject that formula by presenting art teaching a formula of  $X+Y=C$  (assuming that  $A+B$  is not obvious in light of  $X+Y$ ).

In the present application, the art cited by the Examiner does not even teach or suggest the same end result as claimed, let alone teach or suggest the details in arriving at the claimed result. The Examiner admitted that “Pandya, Matsubara and Cain do not expressly disclose the particular bandwidth-limitation formulae listed in the claims.” February 6 Final Office Action, p. 5. He continues that, “*Suni* teaches a method and system (abstract) of a QoS-type system (col. 1, line 1 – col. 9, line 60) that includes the various algorithmic methods of bandwidth limiting decisions (col. 9, line 60 – col. 28, line 40).” *Id.* In reference back to Section I of this Response, *Suni* is an extremely complex reference that teaches methods for measurement-based connection admission control in packet data networks. *Suni*, Abstract. The Examiner’s broadly-stroked rejection of claims 10-13, 21-23, 25, and 26 by stating simply that the bandwidth-limitation formulae that are found in these nine claims are found somewhere between column 9 and column 28 of *Suni*, is a complete failure of the Examiner’s duty to provide a clearly explained examination.

Regardless of this improper rejection, *Suni* does not teach or even suggest any of the formulae of claims 10-13, 21-23, 25, and 26 at any part of its disclosure. *Suni*, in general, discusses a control system that controls admissions to a network based on measurements and estimates calculated with regard to network traffic and considerations of maintaining the priorities of existing connections. Abstract.

Claim 10, as previously amended, requires:

a sequence of bandwidth-limitation descriptions, each of which consists of a start-time and a bandwidth-limitation data, such that said bandwidth-limitation descriptions are sorted by start-time, such that an Nth bandwidth-limitation description defines the bandwidth limitation from its start-time to the start-time of an N+1th bandwidth-limitation description, such that the last bandwidth-limitation description of said sequence of bandwidth-limitation descriptions defines said bandwidth limitation from its start-time to 24, and such that said start-times are interpreted as hours since midnight, and repeat after each day.

Claim 21, as previously amended, similarly requires:

providing a sequence of bandwidth-limitation descriptions, each of which consists of a start-time and a bandwidth-limitation data;  
sorting said bandwidth-limitation descriptions by start-time, such that an Nth bandwidth-limitation description defines the bandwidth limitation from its start-time to the start-time of an N+1th bandwidth-limitation description, such that the last bandwidth-limitation description defines the bandwidth limitation from its start-time to 24, and such that said start-times are interpreted as hours since midnight, and repeat after each day.

*Suni* includes formulae about the number of arrivals (new connections) over a given time period, peak rates at any specific time, the maximal rate envelope (which is a set of peak rates over a number of intervals), estimated future maximal rate envelopes, etc. However, *Suni* does not teach or even suggest a sequence of bandwidth-limitation descriptions, and it certainly does not teach or even suggest a sequence of bandwidth-limitation descriptions each of which consist of a start-time and a bandwidth-limitation data, where the bandwidth limitation descriptions are sorted by start-time, such that an Nth bandwidth-limitation description defines the bandwidth limitation from its start-time to the start-time of an N+1th bandwidth-limitation description, such that the last bandwidth-limitation description of the sequence of bandwidth-limitation descriptions defines the bandwidth limitation from its start-time to 24, and such that the start-times are interpreted as hours since midnight, and repeat after each day. *Suni* does not teach or even suggest anything functionally equivalent to the limitations of claims 10 and 21. Because the Examiner has already admitted that *Pandya*, *Matsubara*, and *Cain* do not teach any of these

limitations, the combination of *Pandya*, *Matsubara*, and *Cain* with *Suni* also does not teach or suggest all of the limitations of claims 10 and 21.

Claim 11, as previously amended, requires, “further able to compute for said client and said feed data the earliest elapsed time E at which said client will be eligible to receive said feed data.” Claim 26 requires, “computing for said client and said feed data the earliest elapsed time E at which said client will be eligible to receive said feed data.” The Examiner asserts that the maximal rate envelope of *Suni* is a functional equivalent of these limitations “because it limits the earliest time of eligibility.” Advisory Action, p. 4. However, the maximal rate envelope of *Suni* has nothing to do with eligibility. As discussed previously, there is a very large conceptual and implementational difference between “priority,” “capacity,” and “eligibility” in networks according to the claimed subject matter. *Suni* uses the maximal rate envelope as one of the variables when considering whether to allow a new connection to the network. Whether or not the traffic capacity of any particular network prevents a user from being allowed to connect to a network has no relation to that user’s eligibility to be on the network and using network bandwidth. Thus, the maximal rate envelope, which is a traffic estimation value, is not functionally equivalent to the computation for a client and the feed data the earliest elapsed time E at which the client will be eligible to receive the feed data, as required in claims 11 and 26. Because the Examiner has already admitted that *Pandya*, *Matsubara*, and *Cain* do not teach any of these limitations, the combination of *Pandya*, *Matsubara*, and *Cain* with *Suni* also does not teach or suggest all of the limitations of claims 11 and 26.

Claim 12, as previously amended, requires:

wherein the amount of said feed data eligible to be received by said client from said server at a current time is determined as a function of credit existing at the time of a previous data transmission, time elapsed between said time of previous data transmission and said current time, the size of said previous data transmission, and bandwidth limitation configuration settings.

*Suni* does not perform any calculations that estimate what any amount of feed data or data that any client is eligible to receive, nor does it disclose or suggest that such an amount is determined as a function of credit existing at the time of a previous data transmission, time elapsed between

the time of the previous data transmission and the current time, the size of the previous data transmission, and the bandwidth limitation configuration settings. Because the Examiner has already admitted that *Pandya*, *Matsubara*, and *Cain* do not teach any of these limitations, the combination of *Pandya*, *Matsubara*, and *Cain* with *Suni* also does not teach or suggest all of the limitations of claim 12.

Claim 13 requires:

wherein the amount of said feed data eligible to be received by said client from said server is computed by the equations:

$\text{new-credit} = X * \text{Exp}(-C * T) - (K/C) * (\text{Exp}(-C * T) - 1)$ , where  
 $C = -\ln(1 - R/M)$ ;  $K = R * C / (1 - \text{Exp}(C))$ , and

where X is the previous value of credit reduced by the size of the last transmission, T is the number of seconds elapsed between the last-transmission-time and the current time, Exp denotes the exponential function, ln denotes the natural logarithm function, K and C are intermediate computational values, M corresponds to the amount of data credit that will be accumulated if an infinite amount of time elapses with no requests, and R corresponds to the amount of data that will be transmitted during a time interval of unity length.

Claim 25 requires:

wherein said amount of said feed data eligible to be received by said client from said server is computed by the equations:

$\text{new-credit} = X * \text{Exp}(-C * T) - (K/C) * (\text{Exp}(-C * T) - 1)$ ; where  
 $C = -\ln(1 - R/M)$ ;  $K = R * C / (1 - \text{Exp}(C))$ ; and

where X is the previous value of credit reduced by the size of the last transmission, T is the number of seconds elapsed between a last-transmission-time and a current time, Exp denotes the exponential function, ln denotes the natural logarithm function, K and C are intermediate computational values, M corresponds to the amount of data credit that will be accumulated if an infinite amount of time elapses with no requests, and R corresponds to the amount of data that will be transmitted during a time interval of unity length.



As noted above, *Suni* simply does not teach or even suggest calculating an amount of feed data eligible to be received by a client. It, therefore, does not teach or even suggest a formula for calculating such an amount of data eligible to receive let alone one configured according the limitations of claims 13 and 25. Nor, does *Suni* provide any functional equivalents of calculating an eligible amount of feed data that can be received by a client/user. Because the Examiner has already admitted that *Pandya*, *Matsubara*, and *Cain* do not teach any of these limitations, the combination of *Pandya*, *Matsubara*, and *Cain* with *Suni* also does not teach or suggest all of the limitations of claims 13 and 25.

Claim 22 requires, “selecting the set of said bandwidth-limitation descriptions which overlaps with the elapsed time between the most recent previous transmission and the current time.” As noted above, *Suni* does not teach or even suggest a set of bandwidth-limitation descriptions, let alone a set of bandwidth-limitation descriptions which overlaps with the elapsed time between the most recent previous transmission and the current time. Because the Examiner has already admitted that *Pandya*, *Matsubara*, and *Cain* do not teach any of these bandwidth formula limitations, the combination of *Pandya*, *Matsubara*, and *Cain* with *Suni* also does not teach or suggest all of the limitations of claim 22.

Claim 23 requires:

determining a single bandwidth-limitation-description whose time-slice encompasses the current time;

if said time-slice encompasses the last transmit time, then  
computing new credit, based on the size of said most recent  
previous transmission, the previous stored value of credit, and the  
elapsed time from said last transmission time to the earlier of the  
current-time or the end of said bandwidth limitation description;  
otherwise,

if said time-slice does not encompass said last transmit time, then  
computing said new credit, based on the size of said last  
transmission, zero previous credit, and the interval from the  
beginning of said time-slice to said current time.

Again, as noted above, *Suni* does not teach or even suggest bandwidth-limitation descriptions, nor does it suggest time-slices that would be within bandwidth-limitation descriptions, if it, in

fact, disclosed bandwidth-limitation descriptions in the first place. *Suni* also does not disclose a formula in which a new credit is calculated differently depending on whether the time-slice of the bandwidth-limitation description encompasses the last transmit time or not. Because the Examiner has already admitted that *Pandya*, *Matsubara*, and *Cain* do not teach any of these bandwidth formula limitations, the combination of *Pandya*, *Matsubara*, and *Cain* with *Suni* also does not teach or suggest all of the limitations of claim 23.

Based on the foregoing, Applicant respectfully requests that the rejections of claims 10-13, 21-23, 25, and 26 likewise be withdrawn.

#### IV. CONCLUSION

In view of the above, applicant believes the pending application is in condition for allowance.

The required fee for the one month extension of time is accompanied with the Extension of Time request. If any additional fee is due, please charge our Deposit Account No. 06-2380, under Order No. 58520/P002US/10204516 from which the undersigned is authorized to draw.

Dated: May 27, 2008

Respectfully submitted,

By 

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